

WHAT IS CLAIMED IS:

5

1. An image forming apparatus comprising:  
a processing unit processing image data;  
an interface unit between a graphics port and  
a peripheral device interconnection port;

10

a print engine connected to the peripheral  
device interconnection port; and

a first memory provided on a side of the  
processing unit with respect to the graphics port,

15

wherein the processing unit stores the image  
data in the first memory, and transfers the image data  
stored in the first memory to the print engine directly  
through the graphics port, the interface unit and the  
peripheral device interconnection port.

20

2. The image forming apparatus as claimed in  
claim 1, further comprising a second memory connected to  
the interface unit so that the second memory is

25

connected to the first memory via the graphics port,  
wherein the processing unit transfers the image data  
from the first memory to the second memory through the  
graphics port so as to transfer the image data from the  
5 second memory to the print engine through the peripheral  
device interconnection port.

10

3. The image forming apparatus as claimed in  
claim 2, further comprising a compressor connected  
between the graphics port and the second memory and a  
decompressor connected to said second memory, wherein  
15 the compressor compresses the image data transferred  
from the first memory to the second memory so as to  
store the compressed image data in the second memory,  
and the decompressor decompresses the compressed image  
data and stores the decompressed image data in the  
20 second memory so as to transfer the decompressed image  
data from the second memory to the print engine through  
the peripheral device interconnection port.

25

4. The image forming apparatus as claimed in  
claim 1, further comprising a decompressor connected  
between the graphics port and the peripheral device  
interconnection port, wherein the processing unit  
5 compresses the image data by using a software and stores  
the compressed image data in the first memory, and the  
decompressor decompresses the compressed image data  
transferred from the first memory to the print engine.

10

5. The image forming apparatus as claimed in  
claim 2, further comprising a decompressor connected  
15 between the second memory and the peripheral device  
interconnection port, wherein the processing unit  
compresses the image data by using a software and stores  
the compressed image data in the first memory, and the  
decompressor decompresses the compressed image data  
20 stored in the second memory and sends the decompressed  
image data to the print engine through the peripheral  
device interconnection port.

25

6. The image forming apparatus as claimed in claim 1, further comprising a decompressor connected the second memory, wherein the processing unit compresses the image data by using a software and stores the compressed image data in the first memory, and the decompressor decompresses the compressed image data stored in the second memory and stores the decompressed image data in the second memory so that the decompressed image data is transferred from the second memory to the print engine through the peripheral device interconnection port.

15

7 A method of transferring image data to a print engine through a peripheral device interconnection port, the method comprising the steps of:

storing the image data in a first memory;  
transferring the image data from the first memory to an interface unit through a graphics port; and  
transferring the image data from the interface unit to the print engine through the peripheral device interconnection port.

25

8. The method as claimed in claim 7, further comprising the steps of:

transferring the image data from the first memory to a second memory through the graphics port; and

5 transferring the image data from the second memory to the print engine through the peripheral device interconnection port.

10

9. The method as claimed in claim 8, further comprising the steps of:

compressing the image data transferred from  
15 the first memory to the second memory;

storing the compressed image data in the second memory;

decompressing the compressed image data stored in the second memory;

20 storing the decompressed image data in the second memory; and

transferring the decompressed image data from the second memory to the print engine through the peripheral device interconnection port.

25

20090416 030000

```

        compressing the image data and storing the
compressed image data in the first memory;

```

```

        transferring the decompressed image data to
the print engine through the peripheral device
10  interconnection port.

```

```

        compressing the image data and storing the
compressed image data in the first memory;

```

decompressing the compressed image data stored  
in the second memory; and

transferring the decompressed image to the  
print engine through the peripheral device  
25 interconnection port.

12. The method as claimed in claim 8, further comprising the steps of:

compressing the image data and storing the compressed image data in the first memory;

5           transferring the compressed image data from the first memory to the second memory through the graphics port;

decompressing the compressed image data stored in the second memory;

10           storing the decompressed image data in the second memory; and

transferring the decompressed image data from the second memory to the print engine through the peripheral device interconnection port.

15

20

25

20090724 14:00:00